



Food and Drug Administration  
10903 New Hampshire Avenue  
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Silver Spring, MD 20993-0002

K2M, Incorporated  
Ms. Nancy Giezen  
Manager, Regulatory Affairs  
751 Miller Drive Southeast  
Leesburg, Virginia 20175

February 10, 2016

Re: K150481  
Trade/Device Name: Cascadia Interbody System  
Regulation Number: 21 CFR 888.3080  
Regulation Name: Intervertebral body fusion device  
Regulatory Class: Class II  
Product Code: MAX  
Dated: August 20, 2015  
Received: August 20, 2015

Dear Ms. Giezen:

This letter corrects our substantially equivalent letter of August 20, 2015.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act

or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Mark N. Melkerson -S**

Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)

K150481

Device Name

Cascadia Interbody System

### Indications for Use (Describe)

The CASCADIA implants are indicated for use with autogenous bone graft as intervertebral body fusion devices in skeletally mature patients. The implants are intended for use at either one level or two contiguous levels, from L2 to S1, for the treatment of degenerative disc disease (DDD) with up to Grade 1 spondylolisthesis or retrolisthesis at the involved levels. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The lumbar implants are intended to be used in patients who have had six months of non-operative treatment.

For all the above indications the CASCADIA implants are intended to be used with supplemental internal fixation appropriate for the implanted level, including K2M Pedicle Screw and Hook Systems, and K2M Spinal Plate Systems.

Type of Use (Select one or both, as applicable)

☒ Prescription Use (Part 21 CFR 801 Subpart D)

☐ Over-The-Counter Use (21 CFR 801 Subpart C)

### CONTINUE ON A SEPARATE PAGE IF NEEDED.

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**510(k) SUMMARY**  
**Cascadia Interbody System**  
**K2M, Inc.**

**Submitter**

K2M, Inc.  
751 Miller Drive SE  
Leesburg, VA 20175

Contact Person: Nancy Giezen  
Telephone: 571 919-2168  
Date Prepared: 08/18/2015

**Classification**

Trade Name: Cascadia Interbody System  
Common Name: Intervertebral Fusion Device with Bone Graft  
Regulatory Class: Class II

**Classification Name(s):**

Intervertebral Body Fusion Device with Bone Graft, lumbar (21 CFR 888.3080, Product Code: MAX)

**Predicate Device(s)**

**Primary Predicate:**

- K2M Aleutian IBF Spinal System (K082698)

**Additional Predicates:**

- K2M Aleutian IBF Spinal System (K110843, K113138, K130699, K133614)
- Zimmer TM Ardis (K113561)
- 4WEB STS (K112316)
- Advanced Medical Technology Fuse (K100945)
- Signus Mobis II ST (K141405)

**Device Description**

The subject submission describes the Cascadia Interbody System. The implants consist of hollow tube structures made of titanium alloy. The devices are available in a variety of different sizes and heights to match more closely the patient's anatomy. The purpose of the subject submission is for a line addition to the lumbar intervertebral body fusion devices previously cleared in the K2M Aleutian Intervertebral Body Fusion System, to include implants additively manufactured from titanium alloy.

**Function:** The system functions as an intervertebral body fusion device to provide support and stabilization of the lumbar segments of the spine.

**Indications For Use**

The CASCADIA implants are indicated for use with autogenous bone graft as intervertebral body fusion devices in skeletally mature patients. The implants are intended for use at either one

level or two contiguous levels, from L2 to S1, for the treatment of degenerative disc disease (DDD) with up to Grade 1 spondylolisthesis or retrolisthesis at the involved levels. DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The lumbar implants are intended to be used in patients who have had six months of non-operative treatment.

For all the above indications the CASCADIA implants are intended to be used with supplemental internal fixation appropriate for the implanted level, including K2M Pedicle Screw and Hook Systems, and K2M Spinal Plate Systems.

#### **Technological Comparison to Predicate(s)**

The Cascadia Interbody System implants were compared to predicate systems and the design features, materials and sizes were found to be substantially the same as these systems.

#### **Non-clinical Performance Evaluation**

Performance evaluations were conducted on constructs representing the worst case components (including static torsion, static compression, dynamic compression, static compression shear, dynamic compression shear (ASTM F2077), subsidence (ASTM F2267) and expulsion) and the proposed implants were found to be substantially the same as predicate devices.

#### **Conclusion**

There are no significant differences between the Cascadia Interbody System and other systems currently being marketed which would adversely affect the use of the product. It is substantially equivalent to these other devices in design, function, material and intended use.